

AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

1. **(Currently Amended)** A premix for an animal feed that exhibits an extended shelf-life which comprises:

- a) ~~a parasitically effective amount about 0.04 to about 5% (w/w) of at least one avermectin or milbemycin compound;~~
- b) a pharmaceutically acceptable excipient comprising:
 - i) ~~a pharmaceutically acceptable surfactant about 5 to about 15% (w/w) of a surfactant wherein said surfactant is selected from the group consisting of polyoxyl 40 hydrogenated castor oil, PEG-50 castor oil, PEG-60 corn glyceride, PEG-60 almond oil, PEG-40 palm kernel oil, and PEG-60 corn oil;~~
 - ii) ~~a pharmaceutically acceptable wax about 5 to about 25% (w/w) of a wax wherein said wax is selected from the group consisting of distilled monoglycerides, glycetyl tribehenate, glycetyl trimyristate, and hydrogenated coco-glycerides;~~
 - iii) ~~a pharmaceutically acceptable antioxidant about 0.1 to about 2% (w/w) of an antioxidant wherein said antioxidant is selected from the group consisting of butylated hydroxyanisole, butylated hydroxytoluene, ascorbic acid, sodium metabisulphite, propyl gallate, sodium thiosulphate, propylene glycol, citric acid, anhydrous citric acid and a mixture thereof;~~
 - iv) ~~a pharmaceutically acceptable carrier vehicle wherein said vehicle is selected from the group consisting of fine corn cobs, corn meal, citrus meal, fermentation residues, ground oyster shells, wheat shorts, molasses solubles, bean mill feed, soy grits, crushed limestone and dried grains about 60 to about 80% (w/w) of a pharmaceutically acceptable carrier vehicle wherein said carrier vehicle is selected from the group consisting of fine ground corn cobs, crushed limestone, and dried grains;~~
 - c) ~~a pharmaceutically acceptable amount of a pharmaceutically acceptable stabilizer in an amount effective to adjust the pH of the premix formulation to a range of about 4 to about 6 and thereby to decrease or to prevent the acid or base catalyzed decomposition in the premix of the at least one avermectin or milbemycin compound; and about 0.3 to about 1.5% (w/w) of an~~

additional amount of a pharmaceutically acceptable acid stabilizer effective to decrease the acid or base catalyzed decomposition of the at least one avermectin compound, and;

d) optionally, an effective amount of at least one insect growth regulating compound.

2. **(Currently Amended)** The premix according to claim 1, wherein the avermectin ~~or milbemycin~~ is selected from the group consisting of ivermectin, abamectin, emamectin, eprinomectin, doramectin, moxidectin, and selamectin.

3. **(Cancelled)**

4. **(Previously Presented)** The premix according to claim 1, wherein the insect growth regulating compound is selected from the group consisting of azadirachtin, diofenolan, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, tetrahydroazadirachtin, and 4-chloro-2-(2-chloro-2-methylpropyl)-5-(6-iodo-3-pyridylmethoxy)pyridizin-3(2H)-one.

5. **(Original)** The premix according to claim 1 wherein the insect growth regulating compound is one that inhibits chitin synthesis.

6. **(Previously Presented)** The premix according to claim 5, wherein the insect growth regulating compound is selected from the group consisting of chlorfluazuron, cyromazine, diflubenzuron, fluazuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron, tebufenozide, teflubenzuron, and triflumuron.

7. **(Original)** The premix according to claim 1 wherein the insect growth regulating compound is selected from the group consisting of methoprenes, pyriproxyfens, hydrofene, cyromazine, lufenuron, 1-(2,6-difluorobenzoyl)-3-(2-fluoro-4-(trifluoromethyl)phenylurea, novaluron and a mixture thereof.

8. **(Previously Presented)** The premix formulation according to claim 1 wherein the pH of the premix is about 5.

9. **(Original)** The premix formulation according to claim 1 wherein the shelf-life is

extended from 6 to 24 months.

10. **(Original)** The premix formulation according to claim 1 wherein the shelf-life is extended from 9 to 18 months.

11. **(Original)** The premix formulation according to claim 1 wherein the stabilizer is selected from a group consisting of: anhydrous citric acid, glycolic acid, thioglycolic acid, gallic acid, maleic acid, and a mixture thereof.

12. **(Currently Amended)** The premix formulation according to claim 1 wherein the stabilizer is anhydrous citric acid.

13. **(Currently Amended)** The premix according to claim 1 which comprises:

- a) about 0.04 to about 5% (w/w) ~~of at least one avermeetin compound ivermectin;~~
- b) a pharmaceutically acceptable excipient comprising:

- i) about 5 to about 15% (w/w) ~~of a surfactant wherein said surfactant is selected from the group consisting of~~ polyoxyl 40 hydrogenated castor oil, PEG 50 castor oil, PEG 60 corn glyceride, PEG 60 almond oil, PEG 40 palm kernel oil, and PEG 60 corn oil;

- ii) about 5 to about 25% (w/w) ~~of a wax wherein said wax is selected from the group consisting of~~ distilled monoglycerides, glyceryl tribehenate, glyceryl trimyristate, and hydrogenated coco glycerides;

- iii) about 0.1 to about 2% (w/w) of an antioxidants wherein said antioxidants are selected from the group consisting of butylated hydroxyanisole, butylated hydroxytoluene, ascorbic acid, sodium metabisulphite, propyl gallate, sodium thiosulphate, propylene glycol, citric acid, anhydrous citric acid and a mixture thereof;

- iv) about 60 to about 80% (w/w) ~~of a pharmaceutically acceptable carrier vehicle wherein said carrier vehicle is selected from the group consisting of~~ fine ground corn cobs, crushed limestone, and dried grains;

- c) a pharmaceutically acceptable amount of a pharmaceutically acceptable stabilizer in an amount effective to adjust the pH of the premix to a range of about 4 to about 6 ~~about 0.3 to about 1.5% (w/w)~~ of additional anhydrous citric acid in order to decrease the acid or base

catalyzed decomposition of the ~~at least one avermectin or milbemycin~~ ivermectin compound, and;

d) optionally, a effective amount of at least one insect growth regulating compound selected from the group consisting of methopenes, pyriproxyfens, hydrofene, cyromazine, lufenuron, 1-(2,6-difluorobenzoyl)-3-(2-fluoro-4-(trifluoromethyl)phenylurea, novaluron and a mixture thereof.

14. **(Original)** The premix according to claim 1, the amount of the added stabilizer is between about 0.3 to about 1.2% (w/w).

15. **(Original)** The premix according to claim 1 wherein the amount of the added stabilizer is about 0.4 to about 0.5% (w/w).

16. **(Original)** The premix according to claim 1 wherein the animal feed is swine feed or horse feed.

17. **(Currently Amended)** A method for extending the shelf life of a premix for an animal feed comprising at least one pharmaceutically active compound wherein said pharmaceutically active compound is an avermectin ~~or milbemycin~~ compound and said method comprises increasing the original amount of stabilizer in an amount effective to ~~adjust the pH of the premix to a range of about 4 to about 6 to~~ decrease the acid or base catalyzed decomposition in the premix of the avermectin ~~or milbemycin~~ compound.

18. **(Original)** The method according to claim 17, wherein the stabilizer is anhydrous citric acid and the at least one avermectin ~~or milbemycin~~ is ivermectin.

19. **(Previously Presented)** The method according to claim 17, wherein the amount of the added stabilizer is about 0.3 to about 1.2% (w/w).

20. **(Previously Presented)** The method according to claim 17, wherein the amount of the added stabilizer is about 0.4 to about 0.5% (w/w).

21. (Original) The method according to claim 17 wherein the shelf life is extended from 6 to 24 months.

22. (Original) The method according to claim 17 wherein the shelf life is extended from 9 to 18 months.

23. (Original) The method according to claim 17, wherein the animal feed is swine feed or animal feed.

24. (New) A premix for an animal feed that exhibits an extended shelf-life consisting essentially of:

a) about 0.5 to about 0.7% (w/w) ivermectin;

b) a pharmaceutically acceptable excipient comprising:

i) about 5 to about 10% (w/w) polyoxyl 40 hydrogenated castor oil;

ii) about 18 to about 25% (w/w) distilled monoglycerides;

iii) about 0.1 to about 0.2% (w/w) butylated hydroxyanisole, propyl gallate, and about 0.01 to about 0.03 % (w/w) anhydrous citric acid in about 0.3 to about 0.4% (w/w) propylene glycol;

iv) about 65 to about 75% (w/w) fine ground corn cobs;

c) about 0.4 to about 0.55% (w/w) increase of anhydrous citric acid, and;

d) optionally, an effective amount of at least one insect growth regulating compound selected from the group consisting of methoprenes, pyriproxyfens, hydrofene, cyromazine, lufenuron, 1-(2,6-difluorobenzoyl)-3-(2-fluoro-4-(trifluoromethyl)phenylurea, novaluron and a mixture thereof.